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Dynamic bandwidth estimation and adaptation for packet communications networks.

Access control for a packet communications network includes a dynamic bandwidth updating mechanism which continuously monitors the mean bit rate of the signal source and the loss probability of the connection. These values are filtered to remove noise and then used to test whether the values fall within a pre-defined acceptable adaptation region in the mean bit rate, loss probability plane. Values falling outside of this region trigger bandwidth updating procedures which, in turn, result in acquiring a new connection bandwidth, and determining new filter parameters and new parameters for a leaky bucket access mechanism.



